

Appn. No. 10/551,626

Attorney Docket No. 12400-045
Client Reference No. AFK 27596-WO-US**III. Remarks**

Claims 1, 2, 4, and 6-9 stand rejected. Claims 1, 2, 4, and 6-9 have been amended and new claim 11 has been added. Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein requested.

The claim language of claim 1 has been amended to more clearly recite the claimed invention as disclosed in the subject application. Claim 1 now recites a fastener assembly including a bolt having a shank terminating with an axially extending projection and an end cap mounted on the axially extending projection. Amended claim 1 further recites that the end cap and the axially extending projection cooperate to be maintained in an assembled condition. No new matter has been added by these amendments.

Claim Rejections - 35 U.S.C. §103(a)

Responsive to the rejections of claims 1, 2, 4, 6, and 7 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,356,255 to Takahashi et al. (*Takahashi*) in view of U.S. Patent No. 3,466,699 to Brown (*Brown*), the combination of *Takahashi* and *Brown* fails to render these claims unpatentable because these references, even in combination, fail to teach each and every element of the claimed invention. For example, claim 1 recites a fastener assembly comprising a bolt having a threaded shank terminating with an axially extending projection and an end cap mounted on the projection, wherein the end cap and the projection cooperate to be maintained in an assembled condition. The end cap has a yieldable formation to engage frictionally with the bore and to retain the fastener assembly in the bore.

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Contrarily, *Takahashi* fails to teach a fastener assembly comprising an end cap having a yieldable formation to engage frictionally with a bore and to retain the fastener in the bore. Rather, *Takahashi* teaches a polymeric plug which masks a bore during a coating process to prevent the coating material from entering into the bore. (See col. 7, lines 15-18.) The Examiner has acknowledged that the polymeric plug taught by *Takahashi* does not have a yieldable formation. Further, the polymeric plug is easily pushed out from the bore by the bolt when the bolt is screwed into the nut and thus the polymeric plug does not cooperate with an axially extending projection of a bolt shank to be maintained in an assembled condition, nor is the polymeric plug used to retain a fastener assembly in the bore, as recited in claim 1 of the present application. (See col. 5, lines 11-12.) In addition, the bolt in *Takahashi* is threaded, rather than moved axially, to engage with the bore. (See col. 7, lines 48-49, 56.) Thus, *Takahashi* does not teach or suggest a fastener assembly having a threaded shank of a bolt configured to engage with a bore when an axial pressure is applied to the fastener assembly, as claimed in the present application.

Furthermore, *Brown* fails to cure the deficiencies of *Takahashi* in that *Brown* fails to teach or suggest a fastener comprising an end cap having a yieldable formation to engage frictionally with a bore and to retain a fastener assembly in the bore. Rather, the yieldable formation in *Brown* is formed integral with the shank of the fastener, as opposed to an end cap of the fastener. Thus, such combination yields a masking plug which receives a shank having a yieldable formation, as opposed to an end cap having a yieldable formation which receives a shank to engage frictionally with the bore when inserted axially into the bore. Hence, the combination of *Takahashi* and *Brown* fails to teach or suggest each and every element of the claimed invention.



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Moreover, combining *Brown* with *Takahashi* would not be obvious to one of ordinary skill in the art and thus such combination is improper. To support an obviousness rejection, the Examiner should identify a reason that would have prompted one of ordinary skill in the relevant field to improve the known device in the same manner as the claimed invention. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-41 (2007). The Examiner must avoid distortion caused by hindsight bias when arguing such a combination is obvious. *Id.* at 1742. The Examiner asserts that it would have been obvious for one of ordinary skill in the art to provide the cap of *Takahashi* with yieldable formations as disclosed in *Brown* because the yieldable formations disclosed in *Brown* are superior in their engagement with the bore.

Contrarily, while one of ordinary skill in the art may be prompted to modify the shank of the bolt in *Takahashi* with the yieldable formation of the shank in *Brown*, the same cannot be said for the polymeric plug in *Takahashi*. The yieldable formation of the shank in *Brown* functions as an efficient means of securing one member to another by merely producing an axial force thereon (see col. 2, lines 56-58, col. 4, lines 22-25), whereas the polymeric plug in *Takahashi* does not function as a means of securing one member to another. Rather, the polymeric plug is simply a masking plug which prevents entry of a coating material and is easily pushed out from the bore by the bolt. (See col. 1, lines 13-16, col. 5, lines 11-12.) Consequently, there is no reason why one of ordinary skill in the art would be prompted to modify the polymeric plug in *Takahashi* with the yieldable formation of *Brown* to provide superior engagement of the polymeric plug with the bore since it is an object of the invention in *Takahashi* to provide a plug that merely functions as a masking member easily removable once the bolt is inserted rather than an end cap which cooperates with an

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axially extending projection of a bolt shank to be maintained in an assembled condition and to retain a fastener assembly in the bore.

Since the combination of *Takahashi* and *Brown* does not teach or suggest each and every element of claim 1 and such combination is improper, reconsideration of the rejections under 35 U.S.C. §103(a) and the allowance of claim 1 are respectfully requested. Further, since claims 2, 4, 6-9, and 11 depend from claim 1, the reasons for allowance of claim 1 apply as well to the dependent claims.

Conclusion

In view of the above remarks, it is respectfully submitted that pending claims 1, 2, 4, and 6-9 are patentably distinguishable over the art of record. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections.

Respectfully submitted,

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Date

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